

Claims

1. A device for creating and dilating an opening in the interspinous ligament, the device comprising:

5 an elongated body, and a handle portion for manipulating the elongated body, and further containing a tapered curved tip adapted for being urged into the interspinous ligament; and

10 whereby the diameter of the tapered curved tip gradually increases from a first diameter to a second diameter, thus allowing for the creation and dilation of an opening in the interspinous ligament.

2. The device according to Claim 1, whereby the tapered curved tip is positioned at an angle relative to the elongated body, so that the interspinous ligament may be accessed with minimal damage to surrounding body tissue.

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3. The device according to Claim 1, whereby the first diameter is one millimeter, and further wherein the second diameter is three millimeters.

20 4. The device according to Claim 1, whereby the first diameter is three millimeters, and further wherein the second diameter is six millimeters.

5. The device according to Claim 1, whereby the first diameter is six millimeters, and further wherein the second diameter is nine millimeters.

6. The device according to Claim 1, whereby the first diameter is nine millimeters, and further wherein the second diameter is twelve millimeters.

7. A device for creating and dilating an opening in the interspinous ligament, the device comprising:  
5 an elongated body, containing a tapered curved tip adapted for being urged into the interspinous ligament; and  
a handle connected with the elongated body for manipulating the elongated body.

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8. The device according to Claim 7, whereby the diameter of the tapered curved tip gradually increases from a first diameter to a second diameter, thus allowing for the creation and dilation of an opening in the interspinous ligament.

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9. The device according to Claim 8, whereby the first diameter is one millimeter, and further wherein the second diameter is three millimeters.

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10. The device according to Claim 8, whereby the first diameter is three millimeters, and further wherein the second diameter is six millimeters.

11. The device according to Claim 8, whereby the first diameter is six millimeters, and further wherein the second diameter is nine millimeters.

12. The device according to Claim 8, whereby the first diameter is nine millimeters, and further wherein the second diameter is twelve millimeters.

13. The device according to Claim 8, whereby the curved tip is  
5 positioned at an angle relative to the elongated body, so that the interspinous ligament may be accessed with minimal damage to surrounding body tissue.

14. A device for creating and dilating an opening in the interspinous ligament, the device comprising:

10 an elongated body, and a handle portion for manipulating the elongated body, and further containing a curved tip adapted for being urged into the interspinous ligament; and

means for determining the size of an opening that an initial trial sizing instrument may be placed within.

15 15. The device according to Claim 14, whereby the tapered curved tip is positioned at an angle relative to the elongated body, so that the interspinous ligament may be accessed with minimal damage to surrounding body tissue.

20 16. The device according to Claim 14, whereby the diameter of the tapered curved tip gradually increases from a first diameter to a second diameter.

17. The device according to Claim 16, whereby the first diameter is one millimeter, and further wherein the second diameter is three millimeters.

18. The device according to Claim 16, whereby the first diameter is  
5 three millimeters, and further wherein the second diameter is six millimeters.

19. The device according to Claim 16, whereby the first diameter is six millimeters, and further wherein the second diameter is nine millimeters.

10 20. The device according to Claim 16, whereby the first diameter is nine millimeters, and further wherein the second diameter is twelve millimeters.

21. A device for creating and dilating an opening of soft tissue, the device comprising:

15 an elongated body, and a handle portion for manipulating the elongated body, and further containing a tapered curved tip adapted for allowing the curved tip to be urged into the soft tissue; and

20 whereby the diameter of the tapered curved tip gradually increases from a first diameter to a second diameter, thus allowing for the creation and dilation of an opening in the soft tissue.

22. The device according to Claim 21, whereby the tapered curved tip is positioned at an angle relative to the elongated body, so that the soft tissue may be accessed with minimal damage to surrounding body tissue.

5 23. The device according to Claim 21, whereby the first diameter is one millimeter, and further wherein the second diameter is three millimeters.

10 24. The device according to Claim 21, whereby the first diameter is three millimeters, and further wherein the second diameter is six millimeters.

25. The device according to Claim 21, whereby the first diameter is six millimeters, and further wherein the second diameter is nine millimeters.

15 26. The device according to Claim 21, whereby the first diameter is nine millimeters, and further wherein the second diameter is twelve millimeters.

27. A tool kit for creating and dilating an opening in soft tissue, the kit comprising:

20 a first elongated body, and a handle portion for manipulating the elongated body, and further containing a tapered curved tip adapted for allowing the curved tip to be urged into the soft tissue, wherein the diameter of the tapered curved tip gradually increases from one millimeter to three millimeters;

a second elongated body, and a handle portion for manipulating the elongated body, and further containing a tapered curved tip adapted for allowing the curved tip to be urged into the soft tissue, wherein the diameter of the tapered curved tip gradually increases from three millimeters to six millimeters;

5 a third elongated body, and a handle portion for manipulating the elongated body, and further containing a tapered curved tip adapted for allowing the curved tip to be urged into the soft tissue, wherein the diameter of the tapered curved tip gradually increases from six millimeters to nine millimeters; and

10 a fourth elongated body, and a handle portion for manipulating the elongated body, and further containing a tapered curved tip adapted for allowing the curved tip to be urged into the soft tissue, wherein the diameter of the tapered curved tip gradually increases from nine millimeters to twelve millimeters.

28. A device for creating and dilating an opening in soft tissue, the  
15 device comprising:

an elongated body, containing a tapered curved tip adapted for being urged into the soft tissue; and

a handle connected with the elongated body for manipulating the elongated body.

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29. The device according to Claim 28, whereby the diameter of the tapered curved tip gradually increases from a first diameter to a second diameter, thus allowing for the creation and dilation of an opening in the soft tissue.

30. The device according to Claim 28, whereby the first diameter is one millimeter, and further wherein the second diameter is three millimeters.

31. The device according to Claim 28, whereby the first diameter is  
5 three millimeters, and further wherein the second diameter is six millimeters.

32. The device according to Claim 28, whereby the first diameter is six millimeters, and further wherein the second diameter is nine millimeters.

10 33. The device according to Claim 28, whereby the first diameter is nine millimeters, and further wherein the second diameter is twelve millimeters.

15 34. The device according to Claim 28, whereby the curved tip is positioned at an angle relative to the elongated body, so that the soft tissue may be accessed with minimal damage to surrounding body tissue.

35. A device for creating and dilating an opening in the soft tissue, the device comprising:

an elongated body, and a handle portion for manipulating the  
20 elongated body, and further containing a curved tip adapted for being urged into the soft tissue; and

means for determining the size of an opening that an initial trial sizing instrument may be placed within.

36. The device according to Claim 35, whereby the tapered curved tip is positioned at an angle relative to the elongated body, so that the soft tissue may be accessed with minimal damage to surrounding body tissue.

5 37. The device according to Claim 35, whereby the size determining means include the diameter of the curved tip gradually increases from a first diameter to a second diameter.

10 38. The device according to Claim 35, whereby the first diameter is one millimeter, and further wherein the second diameter is three millimeters.

39. The device according to Claim 35, whereby the first diameter is three millimeters, and further wherein the second diameter is six millimeters.

15 40. The device according to Claim 35, whereby the first diameter is six millimeters, and further wherein the second diameter is nine millimeters.

41. The device according to Claim 35, whereby the first diameter is nine millimeters, and further wherein the second diameter is twelve millimeters.

20 42. A method for dilating a ligament associated with spinous processes including the steps of::

selecting a device with a handle and a curved tip, wherein the curved tip is gradually tapered from the tip to a portion rearwardly of the tip;

inserting the curved tip through an insertion in the back of a patient until the tip is located adjacent the ligament to be dilated;

5 rotating the curved tip so that it can be urged into the ligament in order to dilate the ligament; and

urging the curved tip into the ligament in order to dilate the ligament.

43. The method of claim 42 wherein the insertion step includes inserting  
10 the tip in a direction which is essentially perpendicular to the back of the patient.

44. The method of claim 42 wherein the insertion step includes inserting the tip in a posterior to an anterior direction.

15           45.     The method of claim 41 wherein in order to address the ligament, the curved tip is rotated from a position substantially parallel to the ligament to a position substantially perpendicular to the ligament.

46. The method of claim 42, including the step of:  
20 selecting a dilation tool with a curved tip having at least one larger diameter  
than the curved tip of the first tool; and  
inserting the second dilation tool to the dilated opening created by the first  
tool in order to further dilate the opening in the ligament.